



Polymer Material Properties

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Ethylene vinyl alcohol

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State: ethylene / vinyl alcohol

Material Properties

Mechanical Properties

Conditions

	State 1	State 2	ASTM
Elastic Modulus (MPa)	2070 - 2657	compressive	D638
Tensile Strength (MPa)	38 - 95	at break	D638
Flexural Strength (MPa)	51 - 72	at yield	D638
at yield or break			
Elongation at break (%)	2 - 2		D790
Izod Impact (J/cm of notch)	180 - 330		D638
1/8" thick specimen unless noted	0.5 - 0.9		D256A

Physical & Electrical Properties

Conditions

	State	ASTM
Specific Gravity	1.12 - 1.2	D792
Water Absorption (% weight increase)	6.7 - 8.6	D570

Processing Properties

Conditions

	Type	ASTM
Melt Flow (gm/10 min)	0.8 - 14	D1238
Melting Temperature (°C)	49 - 72	T _g , amorphous
Melting Temperature (°C)	142 - 191	T _m , crystalline
Processing Temperature (°C)	185 - 249	injection molding
Processing Temperature (°C)	185 - 249	extrusion
Compression Ratio	3 - 4	

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Suppliers

[Eval Co. of America](#)

Lisle, IL 800-423-9762

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Design Formulas
for Plastics
Engineers, , by
Rao, N.S.



Plastics for Engineers:
Materials, Properties,
Applications, , by
Domininghaus, H.



Engineering Materials:
Properties and Selection , 6th
ed., by Budinski, K.G.,
Budinski, M.K. (ed.)